

An aerial photograph of Don Pedro Lake, showing the deep blue water, green forested islands, and surrounding land with roads and parking areas. Numerous small white boats are visible in the water.

Don Pedro Lake Mussel Prevention Program

Administered by Don Pedro Recreation Agency

Sponsored by:

Turlock Irrigation District

Modesto Irrigation District

City & County of San Francisco

www.donpedrolake.com



- On the Tuolumne River
- 6th Largest Reservoir in CA
- 2,030,000 Acre Feet Capacity
- 26 miles long
- 160 miles of shoreline
- 12,960 surface acres

Don Pedro Lake provides Irrigation, Flood Control, Hydropower & Recreation. Mussels could ruin the waters of Don Pedro & also threaten:

- Generating capacity of 203 megawatts
- Upstream & downstream waters
- 458 miles of irrigation canals, irrigating approx. 210,000 acres of farmland

Don Pedro Recreation Area:

- 3 Developed Campgrounds (560 campsites)
- Dispersed Area Boat-in Camping
- 3 Launch Ramps
- 2 Marinas (300+ slips)
- 257 private permitted houseboats

2012 Recreational Use:

- 344,045 Recreational Visitor Days
- 26,959 Vessel Days
- 1,695 Vessel Annual Permits sold
- 67 CDFW Permitted Fishing tournaments

Don Pedro Recreation Agency (DPRA):

- O&M Funded by Recreation Use Fees
- Limited staff (14 permanent – 30 seasonal)



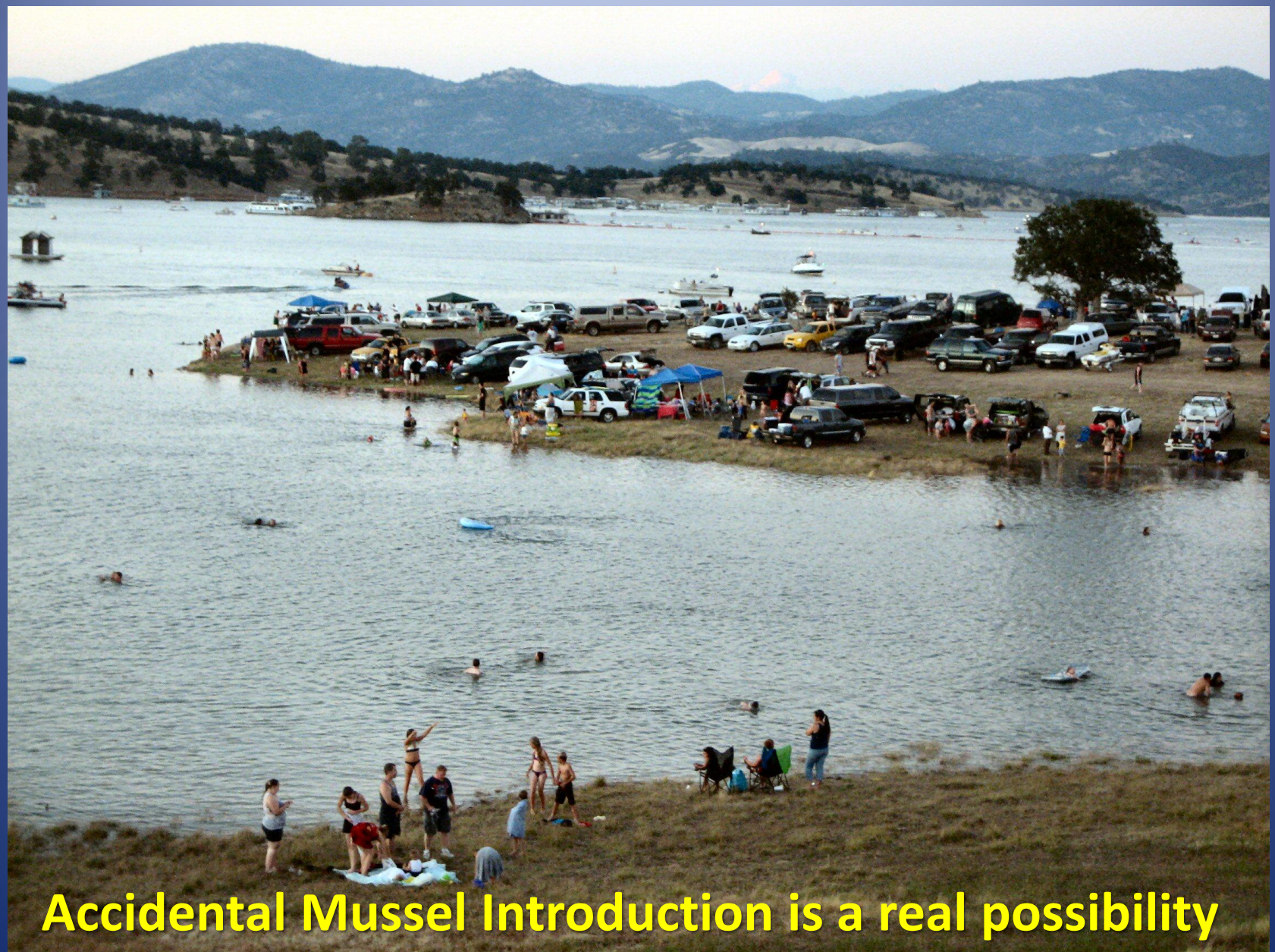


In 2012:

- **6,666 Visitor Days from counties with Mussel infested waters**
- **2,949 Visitor Days from out of state**



Don Pedro's Concessionaire operates marinas on infested waters (Lake Mead & Lake Mohave)



Accidental Mussel Introduction is a real possibility

DON'T MOVE A MUSSEL!

Mussels will ruin your boat,
fisheries and California waters!

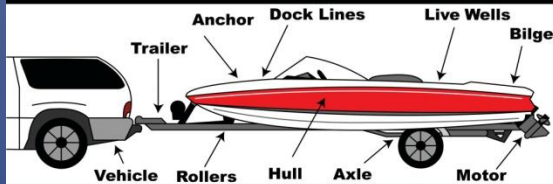
When leaving the water:

- Inspect all exposed surfaces - small mussels feel like sandpaper to the touch.
- Wash the hull of each watercraft thoroughly.
- Remove all plants and animal material.
- Drain all water and dry all areas.
- Drain and dry the lower outboard unit.
- Clean and dry all live-wells.
- Empty and dry any buckets.
- Dispose of all bait in the trash.
- Wait 5 days in hot weather and up to 30 days when cool and moist. Keep watercraft dry between launches into different fresh waters.



REPORT MUSSEL FINDS TO 866-440-9530
VISIT www.dfg.ca.gov/invasives/quaggamussel

LOOK FOR MUSSELS HERE



CHECK YOUR BOAT, TRAILER AND VEHICLE

In 2008, after the discovery of Quagga Mussels in southern CA waterways & Zebra Mussels in San Justo Reservoir, DPRA developed a Mussel Threat Action Plan.

- Staff began attending Mussel workshops & watercraft inspection training
- Posters placed throughout the Recreation Area
- Mussel flyer & links added to website

- Mussel handouts & stickers given to customers with receipts & reservation confirmations
- Marina concessionaire also began distributing Mussel information to their customers



**STOP AQUATIC
HITCHHIKERS!™**

Prevent the transport of nuisance species.
Clean all recreational equipment.
www.ProtectYourWaters.net



- Staff began screening interviews regarding recent history of vessel use
- Boaters informed of clean, drained & dry requirement prior to launch

- Random & suspect vessel inspections initiated
- Dedicated Mussel Spot Inspection Days held in 2009 & 2010



In 2008 DPRA also began Artificial Substrate Mussel Monitoring Program

- Substrates throughout Lake
- Checked monthly
- Status reported to DFG
- 3 artificial substrates currently still in place



- Submerged & floating cables, equipment, buoys, dock floats & vessels are now regularly inspected for mussels during routine maintenance
- Lots of aquatic plant & animal life found
- No Mussels found!



All private & concessionaire houseboats must comply with DPRA Regulations

- Mussel inspection is now a part of all Don Pedro houseboat inspections

Mussel information is also now on the reverse side of Dispersed Area Camping & Navigation Map

Dispersed Area / Boat-In Camping Receipt
Keep this receipt at your Dispersed Area Campsite at all times!

Fleming Blue Oaks Moccasin In Late ()

Last Name: _____ First Name: _____

Today's Date: _____ Trans. #: _____ Initials: _____

_____ Day Use Veh. = _____

_____ Day Use Boat = _____

_____ Lake Camp Night = _____

Total \$ Paid = _____

Departure Date

DON'T MOVE A MUSSEL!
Quagga/zebra mussels
ruin boats and destroy waters

DON'T LET THEM RIDE WITH YOU!

Watercraft and equipment can move quagga and zebra mussels from infested waterbodies to uninfested waterbodies. If spread, these mussels can:

- Envent boat hulls, clog cooling systems, jam steering equipment.
- Alter aquatic ecosystems, resulting in fewer native species and sportfish.
- Litter beaches with sharp, foul smelling shells.
- Clog water distribution systems, resulting in higher utility bills.



YOU CAN STOP THEM!
For more information
866-440-9530

www.dfg.ca.gov/invasives/quagga.html

DON'T SPREAD INVASIVE SPECIES

You can prevent the spread of quagga and zebra mussels using this checklist every time you exit a waterbody:

- ☒ Inspect all watercraft and equipment
- ☒ Clean any visible mud, plants, fish or animals from watercraft and equipment
- ☒ Drain all water, including from lower outboard unit, ballast, live-well, buckets, etc.
- ☒ Dry all areas
- ☒ Dispose of debris and live bait in the trash



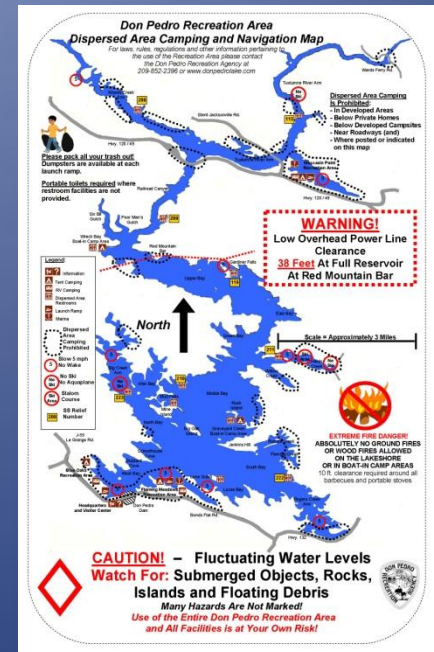
© California Department of Fish and Wildlife

DON PEDRO RECREATION AREA
DISPERSED AREA / PARTIAL & ABRIDGED REGULATIONS
For complete copies of all regulations and other information pertaining to the use of the Recreation Area please contact the Don Pedro Recreation Agency at 209-852-2396 or www.donpedrolake.com



Don Pedro Lake, with over two million acre-feet of water storage is the fifth largest reservoir in the state of California. Don Pedro is surrounded by a federally licensed project boundary. All lands and water within this boundary constitute the Don Pedro Recreation Area. Don Pedro is one of the few lakes in the state where lakeshore camping along undeveloped shoreline is still permitted. Abiding by all Regulations and adhering to safe, courteous and sanitary practices will not only protect the surrounding environment, but will also help to ensure that this privilege of Lakeshore camping at Don Pedro can continue.

- Undeveloped Recreation Area lands and water are considered the "Dispersed Area".
- Permitted camping on Dispersed Area Recreation Area lands outside of the Fleming, Blue Oaks and Moccasin Campgrounds is "Lakeshore Camping".
- Lakeshore Camping is prohibited in developed areas, below private homes, near roadways, where posted and where indicated on the map.
- A current Lakeshore camping permit is required for every Lakeshore campsite, 8 persons maximum per permit.
- All applicable camping, vehicle and vessel permit use fees shall be paid at Recreation Area entrance stations prior to setting up campsite.
- Motorized vehicles are prohibited in the Dispersed Area.
- Quiet time is 10 pm to 7 am, respect your neighbors and keep your noise level to a minimum.
- No person shall occupy a campsite for more than 14 consecutive nights.
- Portable furnishings, structures and vessels shall not to be left unattended overnight.
- Absolutely no ground fires or wood fires are permitted in the Dispersed Area.
- 10 foot clearance required around all portable camp stoves, barbecues and any open flame.
- Campsites shall be kept clean and free of all loose debris, trash and litter at all times.
- Before leaving the Dispersed Area, Campers shall remove all of their trash then dispose of it properly at developed Recreation Area dumpsters.
- Dogs shall be kept on a leash at all times and shall not be left unattended.
- Dispersed Area restrooms shall only be used for their intended purpose.
- Do not tie vessels to floating restrooms for more than 15 minutes at a time and do not camp, jump, dive, swim or fish from them.
- Do not dump trash, diapers or porta-potty contents in Dispersed Area restrooms.
- Do not use the shoreline as a toilet!
- Self-contained portable toilets are required for all campsites that are not near restrooms.
- Porta-potty contents may be disposed of at campground dump stations and marina pump-out facilities.
- Keep off adjacent private property and any area posted "closed" or "no trespassing".
- No person shall use any weapon, except for hunting or fishing purposes in accordance with applicable laws, within the Recreation Area.
- All target shooting and other weapon use is prohibited within the Recreation Area.
- Vessel operators shall comply with all applicable boating laws and regulatory markers.
- Mooring your vessel to, moving or damaging any regulatory buoy is a violation of the law.
- Don Pedro Lake is a reservoir; the lake level is always changing and many hazards are not marked, always watch for submerged objects, rocks, islands, floating debris and reduce your vessel speed when operating in unfamiliar areas and at night!





In November 2012 all
DPRA permanent
Campground & Lake
Operations Staff
completed Level 1
Watercraft &
Equipment Inspector
training.

Course Completion Certificate	
Watercraft Inspection and Decontamination Training for Zebra/Quagga Mussels	
Level One	
Presented To:	
Dave Jigour	
<p>Has successfully completed a 2.5 hour course on "Inspection and Decontamination of Watercraft for zebra/quagga mussels". Presented by the Pacific States Marine Fisheries Commission, United States Fish and Wildlife Service and the 100th Meridian Initiative and its State and Federal partners and is</p> <p>Certified as:</p> <p style="text-align: center;">Watercraft and Equipment Inspector</p>	
Location: <u>Don Pedro Reservoir, CA</u>	Date: <u>November 6, 2012</u>
Presented by: <u>William J. Zook</u> William J. Zook, PSMFC ANS Training Coordinator	
	
	



Don Pedro is open 365 days a year, 24 hours a day

- **Operate with self-service pay stations much of the year**
- **Small staff & un-staffed entrance stations limits our ability to intercept all vessels for Mussel Screening**
- **So, in 2012 with assistance from CDFW Central Region, Mussel Program Scientist, Kelley Aubushon, we initiated a Mussel Self-Inspection program**

Authority:

- CA Fish & Game Code Sections 2301 & 2302
- Requires Mussel prevention program
- DPRA Regulations Sections 2.2.1 & 2.2.3
- Requires permit & display of permit to use Recreation Area
- Mussel Self-Inspection Permits are required for all vessel launches
- Permit must be displayed on tow vehicle dashboard
- Annual cost: \$0.15/Form, Approx. 27,000 forms used per year = \$4,050

Don Pedro Recreation Agency
Quagga & Zebra Mussel Prevention Program
**MUSSEL SELF-INSPECTION
LAUNCH CERTIFICATION PERMIT**
Display Permit on Dashboard When Launching
CA Fish & Game Code Sections 2301 & 2302
DPRA Regulations and Ordinances Sections 2.2.1 & 2.2.3



Answer all questions below, complete, sign & date this Permit and place it on the dashboard of your vehicle before launching your vessel.

1. Is your vessel and all equipment clean of all mud, dirt, plants, fish or animals and drained of all water, including all bilge areas, fresh water cooling systems, lower outboard units, ballast tanks, live-wells, buckets, etc. and completely dry? Yes ___ No ___
If you answered No to question #1, you may not launch your vessel. Your vessel must be cleaned, drained and completely dry before it will be permitted to launch. Do not clean or drain your vessel by the lake or at the launch ramp.
2. If you answered Yes to question #1, has your vessel been in any of the infested waters listed on the back page of this form within the last 30 days? Yes ___ No ___
If you answered No to question #2, you are ready to launch, complete, sign and date this Launch Certification Permit and display it on the dashboard of your vehicle.
3. If you answered Yes to question #2, was your boat and trailer thoroughly cleaned and allowed to completely dry for at least 30 days since you last launched, or has it been professionally decontaminated? (Thoroughly cleaned requires removal of all dirt and organic material from the boat, flushing and draining of all live wells, bilge areas, ballast tanks and fresh water cooling systems. Professional decontamination requires thorough cleaning and flushing with minimum 140° F water.) Yes ___ No ___
If you answered Yes to question #3, you are ready to launch, complete, sign and date this Launch Certification Permit and display it on the dashboard of your vehicle.
If you answered No to question #3, you may not launch your vessel at Don Pedro Lake. Your vessel must be professionally decontaminated or thoroughly cleaned and allowed to dry for at least 30 days before it will be permitted to launch at Don Pedro Lake.

Quagga and Zebra Mussels Pose a Threat to Don Pedro Lake! Mussels in the lake could disrupt the food chain and fishing, foul docks and ramps, encrust vessels, clog engines, litter the shoreline with sharp and smelly shells, clog water distribution systems and could even result in complete closure of the lake.

I affirm that my vessel does not threaten Don Pedro Lake with Quagga or Zebra mussels.

Please check one: ☐ My vessel is clean, drained and dry and has not been in any infested waters within the last 30 days.
☐ My vessel has been thoroughly cleaned & completely dry for at least 30 days since last launched, or has been professionally decontaminated.

Vessel Registration Numbers: _____

Signature: _____ Date: _____

Thank You for helping to protect Don Pedro Lake!

Mussel-Infested Waters in the US

List last updated 12/5/2011 – Source USGS Website:

http://fi.biology.usgs.gov/Nonindigenous_Species/Zebra_mussel_distribution/Lakes_by_county/lakes_by_county.html

California

Anaheim Lake - Orange Co.
Irvine Lake - Orange Co.
Kraemer Basin - Orange Co.
Rattlesnake Reservoir - Orange Co.
Walnut Canyon Reservoir - Orange Co.
Lake Matthews - Riverside Co.
Lake Skinner - Riverside Co.
San Justo Reservoir - San Benito Co.
Cooper Basin Reservoir - San Bernardino Co.
Lake Havasu - San Bernardino Co.
Dixon Lake - San Diego Co.
El Capitan Reservoir - San Diego Co.
Lake Jennings - San Diego Co.
Lake Miramar - San Diego Co.
Lake Poway - San Diego Co.
Lake Ramona - San Diego Co.
Lower Otay Lake - San Diego Co.
Murray Reservoir - San Diego Co.
Olivenhain Reservoir - San Diego Co.
San Vicente Reservoir - San Diego Co.
Sweetwater Reservoir - San Diego Co.
Colorado River & Aqueduct

Arizona

Lake Havasu - Mohave Co.
Lake Mead - Mohave Co.
Lake Mohave - Mohave Co.
Topcock Marsh - Mohave Co.
Mittry Lake - Yuma Co.
Colorado River
Salt River

Nevada

Lahontan Reservoir - Churchill/Lyon Co.
Lake Mead - Clark Co.
Rye Patch Reservoir - Pershing Co.
Colorado River

Utah

Electric Lake - Emery Co.
Red Fleet Reservoir - Uintah Co.
Sand Hollow Reservoir - Washington Co.

Colorado

Grand Lake - Grand Co.
Lake Granby - Grand Co.
Shadow Mountain Reservoir - Grand Co.
Willow Creek Reservoir - Grand Co.
Jumbo Lake - Logan Co.
Tarryall Reservoir - Park Co.
Pueblo Reservoir - Pueblo Co.

New Mexico

Lake Sumner - De Baca Co.

Texas

Lake Texoma - Grayson Co.
Lake Ray Hubbard - Rockwall Co.

Infested River & Lake Systems

Colorado River
Mississippi River
Missouri River
Ohio River
The Great Lakes

Other States with Infested

Waters

Alabama
Arkansas
Connecticut
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Nebraska
New York
North Dakota
Ohio
Oklahoma
Pennsylvania
Tennessee
Vermont
Virginia
West Virginia
Wisconsin

- Back side of Self-Inspection Permit lists infested Waters
- & additional Mussel prevention information & websites
- When entrance stations are staffed, forms are given to customers and they are instructed to complete, sign form & place on dashboard
- Link to form is also on DPRA website so customers can print form in advance of their visit

DON'T SPREAD INVASIVE SPECIES

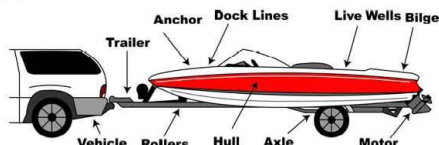
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- ☒ Clean any visible mud, plants, fish or animals from watercraft and equipment
- ☒ Drain all water, including from lower outboard unit, ballast, live-well, buckets, etc.
- ☒ Dry all areas
- ☒ Dispose of debris and live bait in the trash



© California Department of Fish and Game

Trailered boats are the primary way that Quagga/Zebra mussels are introduced to unconnected water bodies.



Whenever you leave freshwater, take the following actions:

1. Inspect and clean vessel & trailer away from water body and launch ramp.
2. Inspect all exposed surfaces of vessel and trailer. Feel your boat's hull for any rough or gritty spots. Young microscopic mussels that have settled like sandpaper. If you find any mussels, alert the Department at 866-440-9530.
3. Wash your vessel's hull, trailer, equipment, bilge, and any other parts with high-pressure, 140° F hot water which will kill the mussels as much as possible.
4. Thoroughly clean and dry all fishing and recreational equipment.
5. Keep your vessel dry for at least five days in warm, dry weather before launching into freshwater again.

For more information, visit: <http://www.dfg.ca.gov/invasives>
www.protectyourwaters.net <http://www.100thmeridian.org>

Thank you for your cooperation!

The Don Pedro Recreation Agency (209) 852-2396, y

News & Announcements

JAN 01

ATTENTION BOATERS!

ATTENTION BOATERS! Don't Move A Mussel! Print and fill out your [Mussel Self-Inspection Launch Certification Permit](#) before you drive up to the lake and save time at the entrance station upon arrival.



Signs at Entrance Stations and Launch Ramps remind visitors of the Mussel Self-Inspection Permit Requirement



When entrance stations are not staffed, Mussel Self-Inspection forms are stocked in self-service dispensers adjacent to self-registration pay stations

ATTENTION BOATERS!

**Mussel Self-Inspection Permits are
now required to launch your vessel at
Don Pedro Lake**

CA Fish & Game Code Sections 2301 & 2302
DPRA Regulations and Ordinances Sections 2.2.1 & 2.2.3

*Please complete, sign and date this permit and display it on
your dashboard. A new complete permit must be signed,
dated and displayed on dashboard each time you launch.*

Permit forms are available at the entrance station and at www.donpedrolake.com.



Thank You for your cooperation!
Don Pedro Recreation Agency
(209) 852-2396



**While patrolling parking
lots for fee compliance,
staff also check for
Mussel Self-Inspection
permit compliance.**

- **When vehicles with
boat trailers that have
not completed Mussel
Self-Inspection
permits are found**
- **A blank Mussel Self-
Inspection form along
with a reminder notice
is placed under the
customer's windshield
wiper**



Pros:

- Mussel Self-Inspection Permit is mandatory for vessel launch
- Every boater receives the same Mussel prevention information
- Only feasible way to get the message out with small staff & large visitation

Cons:

- No real penalty for failure to comply with Mussel Self-Inspection Permit requirement
- Vessel is already on the water when non-compliance is discovered
- Honor system, relies on the honesty & cooperation of the public

Whats new?

- Water samples collected for water quality Risk of Establishment analysis on May 9th & 10th, 2013
- PH, DO & Temp. recorded
- CA & Salinity levels to be determined by lab




Date	Location	Depth	pH	Temp. °C	Temp. °F	DO mg/L
5/9/13	Fleming Launch	15 ft.	7.26	18.8	66	3.4
5/9/13	Fleming Launch	50 ft.	6.92	13	55.4	3.8
5/10/13	Moccasin Launch	15 ft.	7.45	20	68	4.0
5/10/13	Moccasin Launch	50 ft.	6.48	14	57.2	5.0
5/10/13	Fleming WTP	200 ft.	6.88	11.7	53.1	3.5
5/10/13	Blue Oaks WTP	180 ft.	6.64	13.5	56.3	3.2



	pH (mean)	Temp. (mean) °C	DO (mean)
	6.94	15.2	3.8
Risk Ranking	Low	High	Low

USFS Stanislaus National Forest Groveland Ranger District:

- Issues permits to Rafters & Kayakers that boat the Wild & Scenic Tuolumne River
 - Take-out is within the upper reach of Don Pedro Lake
 - 3,135 Commercial & 1,062 Private Rafters in 2012
 - Private Rafters pose potential risk of Mussel Introduction
- 
- The background image shows two blue inflatable rafts on a river with white-water rapids. Several people are in the rafts, some using paddles. The river is surrounded by lush green trees and rocky banks. The scene is captured from a slightly elevated position, looking down the river.
- USFS staff have volunteered to pass out our Mussel Self-Inspection Forms to Private Rafters
 - We have encouraged them to initiate their own Mussel Prevention Program

Thank you for helping to protect Don Pedro Lake

www.donpedrolake.com